

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method for extracting acetaldehyde and determining its content in PET samples in the form either of a whole preform or of PET pieces or granules, comprising:

locating the PET sample in a desorption cell formed from a space, the PET sample being encompassed by and in intimate contact with said space, scavenging said desorption cell with air, incubating and heating the PET sample placed in the cell, pressurizing the cell, charging a loop with gas from the cell, and transferring the loop content to a gas chromatography column and from there to an acetaldehyde detector.

2. (cancelled)

3. (currently amended) [[A]] The method as claimed in claim 1, wherein the loop content is transferred by a transport gas such as hydrogen.

4. (currently amended) [[A]] The method as claimed in claim 1, wherein the gas chromatography column is optimized for acetaldehyde separation.

5. (currently amended) [[A]] The method as claimed in claim 1, wherein after an analysis, cell scavenging with air automatically commences after removing the PET sample.

6. (currently amended) An analyzer for extracting acetaldehyde and automatically determining its content in PET samples, characterised by comprising in combination:

a desorption cell formed from a space into which said sample is inserted;

a removable closure for hermetically sealing said desorption cell, said closure providing a baffle for selective fluid communication between said space and an area external from said space when said desorption cell is hermetically sealed;

means for scavenging said desorption cell with air;

means for incubating and heating the PET sample placed in the cell;

means for pressurizing the cell;

an analyzer-system comprising a separation column optimized for acetaldehyde separation; and

a loop connectable to said cell to receive an aeriform acetaldehyde sample, which is then transmitted to the optimized

separation column and then to an acetaldehyde detector, a complex of controlled valve-means being included for manipulating the fluids flowing within the analyzer.

7. (currently amended) [[An]] The analyzer as claimed in claim 6, wherein the complex of valve means is controlled in accordance with a program by a data processing and control system.

8. (currently amended) [[An]] The analyzer as claimed in claim 7, wherein means are provided for measuring the partial pressure during the desorption step.

9. (currently amended) [[An]] The analyzer as claimed in claim 8, wherein the cell is provided with a perforable baffle for the injection thereinto of a mixture of known acetaldehyde concentration, for calibration purposes.

10. (currently amended) [[An]] The analyzer as claimed in claim 8, wherein for calibration purposes the cell can be connected to a cylinder or similar source supplying a nitrogen/acetaldehyde mixture of known acetaldehyde concentration.

11. (currently amended) [[An]] The analyzer as claimed in claim 6, wherein the cell is provided with electrical controlled heating means.